



CD42CD/CD48CD

For Serial Nos. 790,000 & Higher Part No. 4500-370 Rev. A

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If your Exmark dealer does not have the Exmark part in stock, Exmark will get the parts to the dealer the next business day or the part will be FREE Guaranteed!! (Some restrictions apply. See your participating Exmark Dealer for details.)

Introduction

CONGRATULATIONS on the purchase of your Exmark Cutting Deck. This product has been carefully designed and manufactured to give you a maximum amount of dependability and years of trouble-free operation.

This manual contains operating, maintenance, adjustment, and safety instructions for your Exmark mower.

BEFORE OPERATING YOUR MOWER, CAREFULLY READ THIS MANUAL IN ITS ENTIRETY.

By following the operating, maintenance, and safety instructions, you will prolong the life of your mower, maintain its maximum efficiency, and promote safe operation.

If additional information is needed, or should you require trained mechanic service, contact your authorized Exmark equipment dealer or distributor.

All Exmark equipment dealers and distributors are kept informed of the latest methods of servicing and are equipped to provide prompt and efficient service in the field or at their service stations. They carry ample stock of service parts or can secure them promptly for you from the factory.

All Exmark parts are thoroughly tested and inspected before leaving the factory, however, attention is required on your part if you are to obtain the fullest measure of satisfaction and performance.

Whenever you need service, genuine Exmark parts, or additional information, contact an Authorized Service Dealer or Exmark Customer Service and have the model and serial numbers of your product ready.

Figure 1 identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.

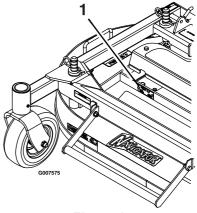


Figure 1

1. Model and serial number location

Model No.	
Serial No	

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Safety Safety Alert Symbol

This Safety Alert Symbol (Figure 2) is used both in this manual and on the machine to identify important safety messages which must be followed to avoid accidents

This symbol means: **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



1. Safety alert symbol

The safety alert symbol appears above information which alerts you to unsafe actions or situations and will be followed by the word **DANGER**, **WARNING**, or **CAUTION**.

DANGER: White lettering / Red background. Indicates an imminently hazardous situation which, if not avoided, **Will** result in death or serious injury.

WARNING: Black lettering / Orange background. Indicates a potentially hazardous situation which, if not avoided, **Could** result in death or serious injury.

CAUTION: Black lettering / Yellow background. Indicates a potentially hazardous situation which, if not avoided, **May** result in minor or moderate injury.

This manual uses two other words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

Safe Operating Practices

Training

- Read the tractor and cutting deck Operator's
 Manuals and other training material. If the
 operator(s) or mechanic(s) can not read English
 it is the owner's responsibility to explain this
 material to them.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- All operators and mechanics should be trained.
 The owner is responsible for training the users.

- Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.
- The owner/user can prevent and is responsible for accidents or injuries occurring to himself or herself, other people or property.

Preparation

- Do Not modify the Navigator cutting deck.
- Only use on machines approved by Exmark.
- Wear appropriate clothing including safety glasses, substantial footwear, long trousers, and hearing protection. Do Not operate when barefoot or when wearing open sandals.

A CAUTION

This machine produces sound levels in excess of 85 dBA at the operator's ear and can cause hearing loss through extended periods of exposure.

Wear hearing protection when operating this machine.

 Inspect the area where the equipment is to be used and remove all rocks, toys, sticks, wires, bones, and other foreign objects which can be thrown by the machine and may cause personal injury to the operator or bystanders.

Operation

- Operate only in daylight or good artificial light, keeping away from holes and hidden hazards.
- Never raise deck with blades running.
- Stop engine, wait for all moving parts to stop, remove key and engage parking brake:
 - Before checking, cleaning or working on the mower.
 - After striking a foreign object or abnormal vibration occurs (inspect the mower for damage and make repairs before restarting and operating the mower).
 - Before clearing blockages.
 - Whenever you leave the mower.

A WARNING

Hands, feet, hair, clothing, or accessories can become entangled in rotating parts. Contact with the rotating parts can cause traumatic amputation or severe lacerations.

- Do Not operate the machine without guards, shields, and safety devices in place and working properly.
- Keep hands, feet, hair, jewelry, or clothing away from rotating parts.
- Stop the blades, slow down, and use caution when crossing surfaces other than grass and when transporting the mower to and from the area to be mowed.
- Be alert, slow down and use caution when making turns. Look behind and to the side before changing directions.

Maintenance and Storage

- Disengage PTO, set parking brake, stop engine and remove key or disconnect spark plug wire.
 Wait for all movement to stop before adjusting, cleaning or repairing.
- Use care when checking blades. Wrap the blade(s)
 or wear gloves, and use caution when servicing
 them. Only replace damaged blades. Never
 straighten or weld them.
- Keep all guards, shields and all safety devices in place and in safe working condition.
- Check all bolts frequently to maintain proper tightness.
- Frequently check for worn or deteriorating components that could create a hazard.
- All replacement parts must be the same as or equivalent to the parts supplied as original equipment.

Safety and Instructional Decals

- Keep all safety signs legible. Remove all grease, dirt and debris from safety signs and instructional labels.
- Replace all worn, damaged, or missing safety signs.
- When replacement components are installed, be sure that current safety signs are affixed to the replaced components.
- If an attachment or accessory has been installed, make sure current safety signs are visible.

- New safety signs may be obtained from your authorized Exmark equipment dealer or distributor or from Exmark Mfg. Co. Inc.
- Safety signs may be affixed by peeling off the backing to expose the adhesive surface. Apply only to a clean, dry surface. Smooth to remove any air bubbles.
- Familiarize yourself with the following safety signs and instruction labels. They are critical to the safe operation of your Exmark commercial mower.





68-8340



98-5954





103-8425



103-8797



103-8798



103-8799

Specifications

Model Numbers

Serial Nos: 790,000 and Higher

CD42CD; CD48CD

Systems

Tires & Wheels

	Front Caster
	Semi-Pneumatic
Quantity	2
Tread	Smooth
Size	8 x 3.00–4
Ply Rating	
Pressure	

Cutting Deck

- Model Numbers:
 - CD42CD
 - CD48CD
- Cutting Width:
 - 42 inch Deck: 42 inch (106.7 cm)48 inch Deck: 48 inch (121.9 cm)
- Discharge: CenterBlade Size: (2 ea.)
 - 42 inch Deck: 22.00 inches (55.9 cm)48 inch Deck: 25.00 inches (63.5 cm)
- Deck Drive:
 - Clutching belt on horizontal engine shaft.
 Dual "A" section hexagon belt with spring tensioned idler to jackshaft and blower.
 - Heavy-duty cast iron, spiral bevel gearbox is final drive to blades.
- Deck:

Full floating deck is attached to out-front support frame. Deck design allows for bagging or mulching.

- Deck Depth:
 - 42 inch Deck: 4 5/8 inches (11.7 cm)

- 48 inch Deck: 4 5/8 inches (11.7 cm)
- Cutting Height Adjustment:

Adjusts from 1 inch (2.5 cm) to 4 inches (10.2 cm) in 1/4 inch (.64 cm) increments.

· Mulching Kit: Optional

Dimensions

Overall Width:

42 inch Deck	48 inch Deck
43.2 inches (109.7 cm)	49.2 inches (125.0 cm)

Overall Length:

42 inch Deck	48 inch Deck
37.2 inches (94.4 cm)	39.9 inches (101.3 cm)

Overall Height:

42 inch Deck	48 inch Deck
13.1 inches (33.3 cm)	13.1 inches (33.3 cm)

Curb Weight:

42 inch Deck	48 inch Deck
295 lb (134 kg)	325 lb (147 kg)

Torque Requirements

Bolt Location	Torque
Blade Mounting Bolt	85-110 ft-lb (115-149 N-m)
Gearbox Mounting Bolts	30-35 ft-lb (41-47 N-m)
Gearbox Assembly Bolts	50-55 ft-lb (68-75 N-m)
Blade Shear Bolts	80-100 in-lb (922-1130 N-cm)

Setup

A WARNING

Operating a Navigator tractor without an approved Exmark front mount attachment increases the possibility of operator entanglement in drive wheels or forward tip over. Entanglement or tip-over could cause serious injury or death.

When operating a Navigator tractor without an approved Exmark front mount attachment, observe the following:

- Keep feet and clothing away from tires.
- Limit operation to minimum required to install a different front mount attachment.
- Minimize speed and use extreme caution.
- Only operate on a flat level surface.
- Do Not operate up or down a trailer ramp.
- Avoid sudden acceleration or deceleration.



Important: Do Not transport Navigator tractor without and approved Exmark front mount attachment.

- 1. Stop engine, wait for all moving parts to stop and remove key. Engage parking brake.
- 2. Roll the mower deck up to the Navigator tractor with the discharge tube down, making sure the deck springs are located above the drive wheel and below the console on each side.
- 3. Raise seat and install drive shaft onto jackshaft (see Figure 3)

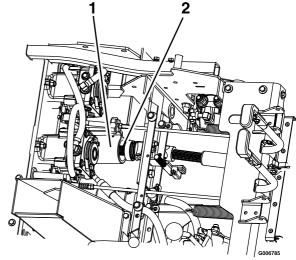
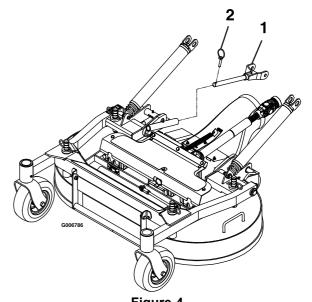
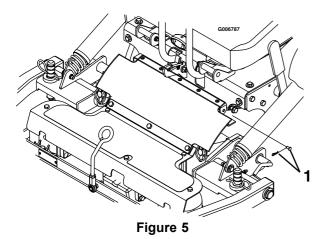


Figure 3

- 1. Jackshaft
- 2. Drive shaft
- 4. Align deck push arm tubes to tractor push arms and push deck rearward. Secure push arms with lynch pins on left and right sides of the unit (see Figure 4).



- Figure 4
- 1. Slide the push arm into the deck push arm tube
- 2. Secure the push pin arm with lynch pin
- 5. Align upper portion of the PTO rubber guard to the tabs on the front of the console and secure with a clevis pin and hairpin on each side (see Figure 5).



- 1. Secure PTO guard with clevis pin and hairpin
- 6. Release the deck locking pins on each side, raise mower deck to the service position and secure deck latch onto hook. See **Raising the Deck to the Service Position** section in Operation.
- 7. Install springs onto the spring anchor pins under the left and right consoles and secure with a washer and hairpin (see Figure 6).

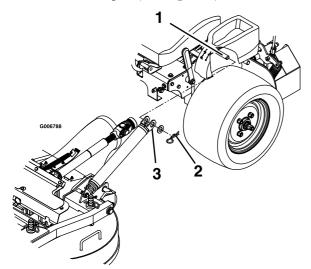


Figure 6

- 1. Spring anchor pin under console
- 2. Secure springs with a washer and hairpin
- 3. Slide spring onto spring anchor pin
- 8. Un-latch deck from raised position, slowly lower deck to ground and lock deck locking pins on each side **Lowering the Deck to the Operation Position** section in Operation.

Deck Removal

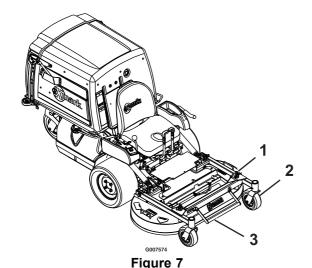
- 1. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.
- 2. Raise mower deck up and latch with deck locking pins per Raising the Mower Deck to the Service Position section in Operation.
- 3. Remove hairpins and washers at the top of the deck lift assist spring on each side of the unit (see Figure 6).
- 4. Remove the spring from the spring anchor. Repeat for other side of unit.
- Un-latch deck from raised position and slowly lower deck to ground per Lowering the Mower Deck to the Operation Position section in Operation.

Note: Deck will become heavier once springs are removed from the anchors. Lower deck carefully.

- 6. Remove lynch pins at front of push arms on both sides of the unit (see Figure 4).
- 7. Remove hairpin and clevis from both sides of the PTO guard (see Figure 5).
- 8. Raise seat and disconnect drive shaft using quick coupler at jackshaft (see Figure 3).
- 9. Pull mower deck forward to remove from unit.

Important: Do Not transport Navigator tractor without an approved Exmark front mount attachment.

Product Overview



3. Deck lift handle

- 1. Cut height adjustment
- 2. Caster wheel

Operation

Adjusting the Cutting Height

The cutting height of the mower deck is adjusted from 1 to 4 inches (2.5 cm to 10.2 cm) in 1/4 inch (.63 cm) increments.

- 1. Stop the machine and move the speed control levers to the neutral position.
- 2. Disengage the PTO.
- 3. Engage the park brake.
- 4. Stop the engine, remove the key and wait for all moving parts to stop.
- 5. Move cotter pins on four deck support pins to proper hole for height of cut desired.

Deck Raising and Lowering

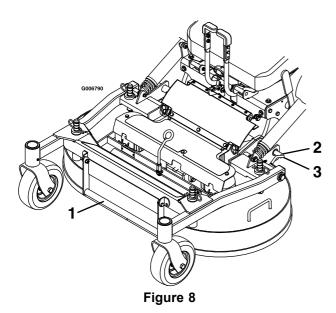
Raising the Mower Deck into Service Position

1. Stop engine, wait for all moving parts to stop and remove key. Engage parking brake.

A WARNING

Incorrectly raising or lowering a mower deck can be dangerous. A dropped mower deck can result in a serious injury or property damage.

- Always raise and lower deck on flat, dry ground, free of any obstructions.
- Firmly grasp the deck lift handle and lower in a slow controlled manner.
- Always make sure the deck is securely latched in the "up" or "down" position.
- 2. Release the deck locking pins on each side (Figure 8).



- Deck lift handle
- Rotate the deck locking pin toward the rear and pull outward to unlock.
- Push the deck locking pin in and rotate toward the front to lock.
- 3. Using deck lift handle, lift deck up and latch in "up" position (latch is located at front center of seat) (see Figure 9).

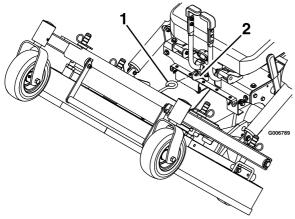


Figure 9

- Secure the deck in the raised position by securing the deck latch onto the hook.
- 2. Hook

A WARNING

Operating the mower deck in the raised service position can be dangerous. Engaging the PTO with a deck in the raised position can result in a serious injury or property damage.

Always lower and lock mower deck in the operation position before engaging the PTO.

Lowering the Mower Deck to the Operating Position

- 1. While firmly holding onto deck lift handle, unhook deck latch from tractor section and slowly lower deck to ground (see Figure 9).
- 2. Push deck locking pins inward and rotate forward to securely lock deck in lowered position (see Figure 8).

A WARNING

Operating mower without locking pins securely latched can result in the mower deck folding up unexpectedly. The mower deck folding up unexpectedly can cause serious injury.

Always operate mower with locking pins securely latched.

Adjusting Fill Reduction System (FRS) Baffles

The Navigator's exclusive Fill Reduction System has been designed to allow you to reduce the amount of clippings collected by varying degrees.

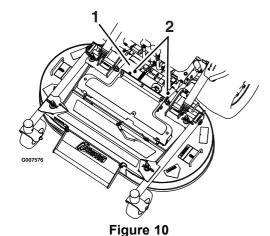
Advantages include less frequent emptying of the hopper and return of nutrients to the soil.

Possible Configurations:

- 1. Baffles open, standard blades Maximum collection
- 2. Baffles closed, standard blades Partial mulching
- 3. Baffles closed, mulch blades Intermediate mulching
- 4. Mulch plug installed, mulch blades Complete mulching (requires mulch kit)

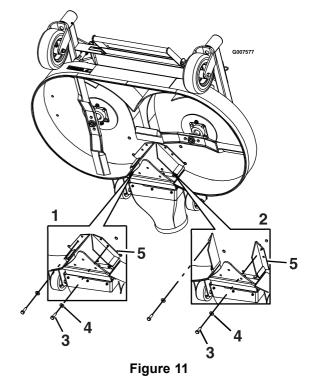
To adjust the FRS baffles:

- 1. Stop engine, wait for all moving parts to stop and remove key. Engage parking brake.
- 2. Remove hair pins and clevis pins from both sides of the PTO guard (see Figure 5). Fold guard forward.
- 3. Loosen nyloc nuts on the rear studs of the FRS baffles.



 PTO guard removed for 2. Loosen nyloc nuts clarity

- 4. Raise deck as stated in **Raising the Mower Deck** to the Service Position section.
- 5. Remove bolt and washer at the front of each of the FRS baffles. Rotate baffles into desired position and reinstall bolt and washer.



- 1. Baffles shown in closed position
- 2. Baffles shown in open position
- 3. Bol
- 4. Washer
- 5. Baffles
- 6. Lower deck per **Lowering the Mower Deck to the Operating Position** section.
- 7. Snug nyloc nuts on the rear studs of the FRS baffles. These nuts may be left slightly loose if frequent baffle adjustment is anticipated.
- 8. Reinstall PTO guard using clevis pins and hair pins removed in step 2.

Maintenance

Note: Determine the left and right sides of the machine from the normal operating position.

A WARNING

While maintenance or adjustments are being made, someone could start the engine. Accidental starting of the engine could seriously injure you or other bystanders.

Remove the key from the ignition switch, engage parking brake, and pull the wire(s) off the spark plug(s) before you do any maintenance. Also push the wire(s) aside so it does not accidentally contact the spark plug(s).

Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
After the first 50 hours	Change oil in all three gearbox housings. Add oil as needed until level with oil drain plug.
Before each use or daily	 Check the mower blades. Check for loose hardware. Grease the front caster wheel hub. Clean the grass and debris build-up from the cutting deck. Clean the grass build-up from under the deck.
Every 40 hours	Check the condition of the belts.Grease the drive shaft.
Every 100 hours	 Change oil in all three gearbox housings. Add oil as needed until level with oil drain plug. thereafter Grease the deck flip-up. Grease the pivot arm tubes.
Yearly	 Grease the front caster pivots. Lubricate the caster wheel hubs.

Periodic Maintenance

Check Mower Blades

Service Interval: Before each use or daily

- 1. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.
- 2. Lift deck and secure in raised position as stated in section Raising the Mower Deck to the Service Position.

- 3. Inspect blades and sharpen or replace as required.
- 4. To remove blade, use a block of wood or locking pliers to hold blade in place and remove the 1/2-20 x 2 1/4 inch blade bolt that secures the blade and blade driver.
- 5. Re-install the blade driver (with new blades) by using a block of wood or locking pliers to hold the blade in place and torque the blade bolts to 85-110 ft-lb (115-149 N-m).

Note: Blade driver flats must be aligned with the flats on the shaft when installing blade on the mower deck.

6. Lower the mower deck to the operation position (see section Lowering the Mower Deck to the Operation Position).

A WARNING

Operating a mower deck with loose or weakened blade bolts can be dangerous. A loose or weakened blade bolt could allow a blade rotating at a high speed to come out from under the deck, causing serious injury or property damage.

- Replace the blade bolt after striking a foreign object.
- Use only genuine Exmark replacement parts.
- Do Not lubricate the threads of the bolt or spindle before assembly.
- Torque the blade bolt to 85-110 ft-lb (115-149 N-m).
- Torque the shear bolts to 80-100 in-lb (922-1130 N-cm).

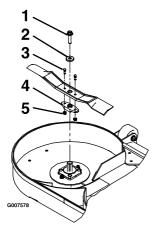


Figure 12

- 1. 1/2-20 x 2 1/4 blade bolt— torque to 85-110 ft-lb (115-149 N-m).
- 2. Washer
- 3. Shear bolts—torque to 80-100 in-lb (922-1130 N-cm)
- 4. Blade driver
- 5. 1/4-20 nyloc nuts

Check for Loose Hardware

Service Interval: Before each use or daily

- 1. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.
- 2. Visually inspect machine for any loose hardware or any other possible problem. Tighten hardware or correct the problem before operating.

Check Tire Pressures

Service Interval: Every 40 hours

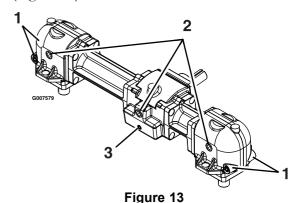
The front caster tires are semi-pneumatic and Do Not need to be inflated.

Note: Do Not add any type of tire liner or foam fill material to the tires. Excessive loads created by foam filled tires may cause failures to the hydro drive system, frame, and other components. Foam filling tires will void the warranty.

Change Gearbox Oil

Service Interval: After the first 50 hours Every 100 hours thereafter

- 1. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.
- 2. Place unit on a level surface.
- 3. Remove the gearbox and drive shaft assembly from the mower deck. Retain hardware for re-use.
- 4. Remove the large oil drain plug on the front of each of the three gearbox sections and drain oil (Figure 13).



- Small magnetic plugs (front and back)
- 2. Large oil drain/fill plug
- Small magnetic plug (front only)

- Remove small magnetic plugs and wipe away any material accumulated on the plugs.
- 6. Apply a Teflon pipe sealant to all small magnetic plugs and re-install into the gearbox.
- 7. Re-install the gearbox and drive shaft assembly to the mower deck.
- 8. Fill gearbox with Mobil SHC (synthetic) 75W-90 gear lube oil until level with oil drain/fill plug. Each of the gearbox sections must be filled separately.

Note: Mower deck should remain level to the ground when filling gearbox with oil. Do Not fill gearbox with deck raised in the service position.

9. Apply a Teflon pipe sealant to the 3 large oil plugs and re-install into the gearbox.

Lubricate Grease Fittings

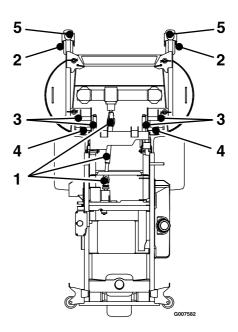
Note: See chart for service intervals.

- 1. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.
- 2. Lubricate fittings with NGLI grade #2 multi-purpose gun grease.

Refer to the following chart for fitting locations and lubrication schedule.

Lubrication Chart			
Fitting Locations	Initial Pumps	Number of Places	Service Interval
1. Drive Shaft	1	3	40 Hours
2. Front Caster Wheel Hub	1	2	8 Hours
3. Deck Flip-Up	1	4	100 Hours
4. Push Arm Tubes	1	2	100 Hours
5. Front Caster Pivots	*0	2	*Yearly

* See step 3 for special lubrication instructions on the front caster pivots and the **Lubricate Caster Wheel Hubs** section for special lubrication instructions on the front casters wheel hubs.

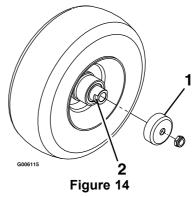


3. Lubricate caster pivots once a year. Remove hex plug and cap. Thread grease zerk in hole and pump with grease until it oozes out around top bearing. Remove grease zerk and thread plug back in. Place cap back on.

Lubricate Caster Wheel Hubs

Service Interval: Yearly

1. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.



- 1. Seal guard
- 2. Spacer nut with wrench flats
- 2. Remove caster wheel from caster forks.
- 3. Remove seal guards from the wheel hub.
- 4. Remove one of the spacer nuts from the axle assembly in the caster wheel. Note that thread locking adhesive has been applied to lock the

- spacer nuts to the axle. Remove the axle (with the other spacer nut still assembled to it) from the wheel assembly.
- 5. Pry out seals, and inspect bearings for wear or damage and replace if necessary.
- 6. Pack the bearings with a NGLI grade #1 multi-purpose grease.
- 7. Insert one bearing, one new seal into the wheel.

Note: Seals (Exmark PN 103-0063) must be replaced.

- 8. If the axle assembly has had both spacer nuts removed (or broken loose), apply a thread locking adhesive to one spacer nut and thread onto the axle with the wrench flats facing outward. Do Not thread spacer nut all of the way onto the end of the axle. Leave approximately 1/8 inch (3 mm) from the outer surface of the spacer nut to the end of the axle inside the nut.
- 9. Insert the assembled nut and axle into the wheel on the side of the wheel with the new seal and bearing.
- 10. With the open end of the wheel facing up, fill the area inside the wheel around the axle full of NGLI grade #1 multi-purpose grease.
- 11. Insert the second bearing and new seal into the wheel.
- 12. Apply a thread locking adhesive to the 2nd spacer nut and thread onto the axle with the wrench flats facing outward.
- 13. Torque the nut to 75-80 in-lb (8-9 N-m), loosen, then re-torque to 20-25 in-lb (2-3 N-m). Make sure axle does not extend beyond either nut.
- 14. Reinstall the seal guards over the wheel hub and insert wheel into caster fork. Reinstall caster bolt and tighten nut fully.

Important: To prevent seal and bearing damage, check the bearing adjustment often. Spin the caster tire. The tire should not spin freely (more than 1 or 2 revolutions) or have any side play. If the wheel spins freely, adjust torque on spacer nut until there is a slight amount of drag. Reapply thread locking adhesive.

Thread Locking Adhesives

Thread locking adhesives such as "Loctite 242" or "Fel-Pro, Pro-Lock Nut Type" are used on the following fasteners:

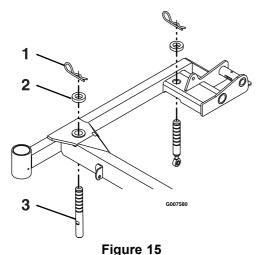
Caster wheel spacer nuts.

Adjustments

Note: Disengage PTO, shut off engine, wait for all moving parts to stop, engage parking brake, and remove key before servicing, cleaning, or making any adjustments to the unit.

Deck Leveling

- 1. Position mower on a flat surface.
- 2. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.
- 3. Inflate drive tires to 15 psi (103 kPa).
- 4. Verify all hairpins are in the 3 inch deck height holes with the spacers under the hair pins (Figure 15).



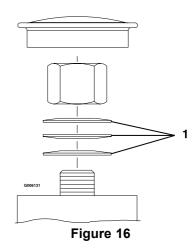
Right Hand Side Shown

- 1. Hairpin
- 3. Deck support pin
- 2. Spacer
- 5. Shorten/lengthen each deck support pin to obtain blade tip height of 3 inches at the front of the deck and 3 1/4 inches at the rear of the deck.

Caster Pivot Bearings Pre-load Adjustment

Remove dust cap from caster and tighten nyloc nut until washers are flat. Back the nyloc off 1/4 of a turn to properly set the pre-load on the bearings.

Note: If disassembled, make sure the spring washers are reinstalled as shown in Figure 16.



1. Spring disc washers

Deck Locking Pin Stop Adjustment

- 1. Slide deck locking pins in on both sides and rotate to lock the deck in the "operation" position.
- 2. Loosen the jam nut and turn the stop screw clockwise until the locking pins is tight and cannot be rotated by hand (Figure 17).

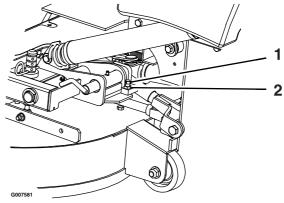


Figure 17

- Rotate stop screw clockwise until locking pin is tight, then back off 1/2 turn.
- 2. Loosen jam nut
- 3. Loosen the stop screw counter clockwise 1/2 turn and tighten the jam nut
- 4. Test the locking pin to make sure it slides freely. Readjust if necessary.

Cleaning

Clean Debris From Cutting Deck

Service Interval: Before each use or daily

- 1. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.
- 2. Clean off any oil, debris, or grass build-up on the cutting deck, especially under deck belt shields.

Clean Grass Build-Up Under Deck

Service Interval: Before each use or daily

- 1. Stop engine, wait for all moving parts to stop, and remove key. Engage parking brake.
- 2. Raise mower deck and secure in latched position (see Raising the Mower Deck to the Service Position section in Operation).
- 3. Clean out any grass build-up from underside of deck and in discharge chute.
- 4. Lower deck to cutting position and lock deck locking pins (see **Lowering the Mower Deck to the Operation Position** section in Operation.

Troubleshooting

Important: It is essential that all operator safety mechanisms be connected and in proper operating condition prior to mower use.

When a problem occurs, do not overlook the simple causes. For example: starting problems could be caused by an empty fuel tank.

The following table lists some of the common causes of trouble. Do Not attempt to service or replace major items or any items that call for special timing of adjustments procedures (such as valves, governor, etc.). Have this work done by your **Engine Service Dealer**.

Note: When disconnecting electrical connectors Do Not pull on the wires to separate the connectors.

Problem	Possible Cause	Corrective Action
Uneven cutting height.	1. Blade(s) not sharp.	1. Sharpen the blade(s).
	 Cutting blade(s) is/are bent. Mower deck is not level. Underside of mower is dirty. Tire pressure in drive tires not correct. Spacers are in wrong location. Tips of adjacent blades are at an uneven cutting height. Blades tips should be even within 3/16 inch which is approximately 	 Install new cutting blade(s). Level mower deck from side-to-side and front-to-rear. Clean the underside of the mower. Adjust tire pressure in the drive tires. Position spacers under hairpins. Replace blades, spindles and (or) check for damage to mower deck.
Abnormal vibration.	one blade thickness. 1. Cutting blade(s) is/are bent or unbalanced. 2. Blade mounting bolt is loose. 3. Engine mounting bolts are loose. 4. Engine pulley is damaged. 5. Blade spindle is bent.	 Install new cutting blade(s). Tighten the blade mounting bolt. Tighten the engine mounting bolts. Contact an Authorized Service Dealer. Contact an Authorized Service Dealer.
Blades Do Not rotate.	 PTO belt is worn, loose, or broken. PTO shaft is not connected. PTO belt is off pulley. 	 Check belt tension or replace belt Connect PTO shaft. Check belt for damage. Install belt and check adjusting shafts and belt guides for correct position.

Exmark Commercial Turf Equipment 2 Year Limited Warranty

Conditions and Products Covered

Exmark Mfg. Co. Inc. and its affiliate, Exmark Warranty Company, pursuant to an agreement between them, jointly warrant on the terms and conditions herein, that we will repair, replace or adjust any part on these products and found by us (in the exercise of our reasonable discretion) to be defective in factory materials or workmanship for a period of two years.

This warranty applies to Exmark commercial turf equipment sold in the U.S. or Canada. This warranty may only be assigned or transferred to a second (or third) owner by an authorized Exmark dealer. The warranty period commences upon the date of the original retail purchase.

Warranty Exceptions

Warranty Period

• Bags, Belts and Tires

90 days

• Battery

1 Year Prorated

• Engine

2 years*

* The Engine warranty is covered by the engine manufacturer. Please refer to the engine manufacturer's warranty statement that is included in the literature packet.

This warranty only includes the cost of parts and labor.

Items and Conditions Not Covered

This warranty does not cover the following:

- Pickup and delivery charges to and from any authorized Exmark Service Dealer.
- Any damage or deterioration due to normal use, wear and tear, or exposure.
- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, tune-up parts, and adjustments.
- Any product or part which has been altered or misused or required replacement or repair due to normal wear, accidents, or lack of proper maintenance.
- Any repairs necessary due to use of parts, accessories or supplies, including gasoline, oil or lubricants, incompatible with the turf equipment or other than as recommended in the operator's manual or other operational instructions provided by Exmark.

There are no other express warranties except for engine and special emission system coverage.

All warranty work must be performed by an authorized Exmark Service Dealer using Exmark approved replacement parts.

Instructions for Obtaining Warranty Service

The product must be registered with original proof of purchase by an Exmark Service Dealer before obtaining any warranty service.

Contact any Exmark Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, access our website at www.exmark.com. U.S. or Canada customers may also call 402-223-6375.

If for any reason you are dissatisfied with the Service Dealer's analysis or with the assistance provided, contact us at:

Exmark Customer Service Department The Exmark Warranty Company 2101 Ashland Avenue Beatrice, NE 68310 402-223-6375 or service@exmark.com

Owner's Responsibilities

The Exmark turf equipment, including any defective part, must be returned to an authorized Exmark service dealer within the warranty period. This warranty extends only to turf equipment operated under normal conditions. You must read the operator's manual. You must also properly service and maintain your Exmark product as described in the operator's manual. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

General Conditions

The sole liability of Exmark and Exmark Warranty Company with respect to this warranty shall be repair or replacement of defective components as set forth herein. Neither Exmark nor Exmark Warranty Company shall be liable for any incidental or consequential loss or damage.

Such damages include but are not limited to:

- Expenses related to gasoline, oil or lubricants.
- Travel time, overtime, after hours time or other extraordinary repair charges or charges relating to repairs or replacements outside of normal business hours at the place of business of the authorized Exmark Service Dealer.
- Rental of like or similar replacement equipment during the period of any warranty, repair or replacement work.
- Any telephone or telegram charges or travel charges.
- Loss or damage to person or property other than that covered by the terms of this warranty.
- Any claims for lost revenue, lost profit or additional cost as a result of a claim of breach of warranty.
- · Attornev's fees.

No Claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Exmark mower.

All implied warranties of merchantability (that the product is fit for ordinary use) and fitness for use (that the product is fit for a particular purpose) are limited to the duration of the express warranty.

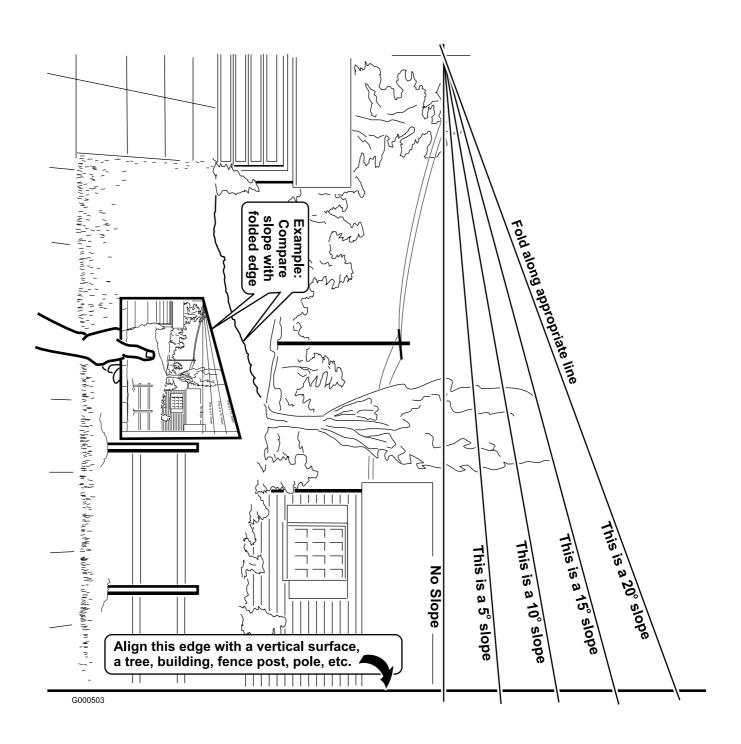
Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

G4500-425

Service Record

Date:	Description of Work Done:	Service Done By:



SEE EXMARK'S COMPLETE LINE OF ACCESSORIES AND OPTIONS

MID-MOUNT RIDING ACCESSORIES AND OPTIONS

CUSTOM RIDE SEAT SUSPENSION SYSTEM

FULL SUSPENSION SEAT

DECK LIFT ASSIST KIT

HITCH KIT

LIGHT KIT

OPERATOR CONTROLLED DISCHARGE

ROLL OVER PROTECTION SYSTEM (ROPS)

SUN SHADE

TRASH CONTAINER

TURF STRIPER

12V POWER PORT ULTRA VAC COLLECTION SYSTEM
MICRO-MULCH SYSTEM ULTRA VAC QUICK DISPOSAL SYSTEM

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HITCH KIT TRASH CONTAINER

LIGHT KIT ULTRA VAC COLLECTION SYSTEM

MICRO-MULCH SYSTEM ULTRA VAC QUICK DISPOSAL SYSTEM

ROLL OVER PROTECTION SYSTEM (ROPS) WEATHER CAB

WALK-BEHIND ACCESSORIES AND OPTIONS

GRASS CATCHER TURF STRIPER
MICRO-MULCH SYSTEM STANDON

Place Model No. and Serial No.

Label Here (Included in the Literature

Pack) or Fill in Below

Date F

Model No. _____

Date Purchased _____

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